

Changes for the Better



Mitsubishi PLC
Mitsubishi Integrated FA Software

QJ71AS92 AS-i Master Module
GX Configurator-AS Version 1

2002 No.180E

NEW PRODUCT RELEASE



New!

Implementation of Q Series into the AS-i system is now available.

Compatible with AS-i Ver.2.11

Supports a maximum of 62 slaves (I/O slave only), as well as analog slaves.

Easy programming

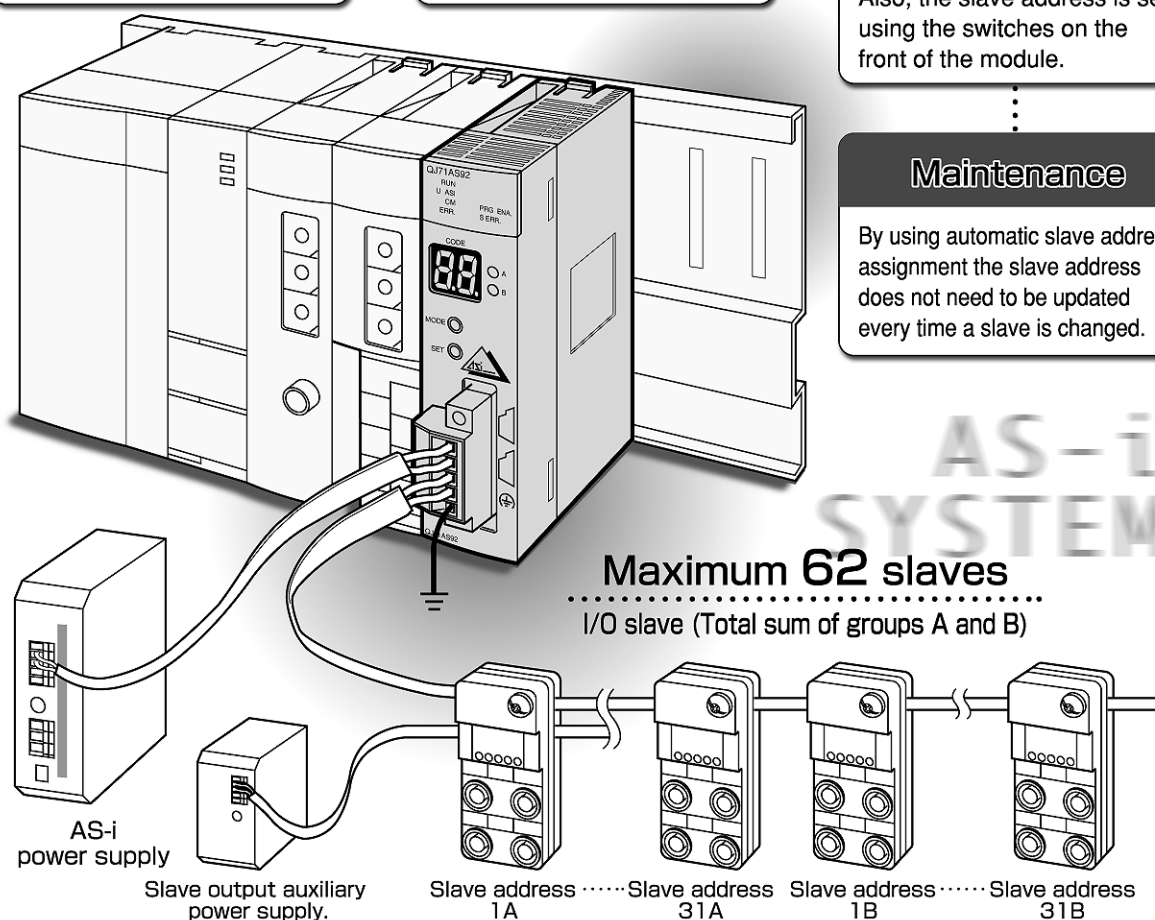
Automatic refresh and slave address are set easily with GX Configurator-AS.

Easy Setting

Also, the slave address is set using the switches on the front of the module.

Maintenance

By using automatic slave address assignment the slave address does not need to be updated every time a slave is changed.



(1) QJ71AS92

The QJ71AS92 is compatible with AS-Interface Specification Version 2.11 (hereinafter referred to as AS-i Ver. 2.11) as a master module in an AS-i system.

[Feature]

- **Compatible with AS-i Ver. 2.11**

The QJ1AS92 master can control a maximum of 62 slaves by splitting the slave addresses into two groups. Also, it can communicate with analog input or output slaves.

- **Easy programming**

GX Configurator-AS (sold separately) enables the automatic refresh to be set from within the software, resulting in easy sequence programming, slave address setting, and monitoring of the setting and operation statuses.

- **Easy setting**

You can configure the slave address just by using the switches on the front of the module.

- **Maintenance (Automatic slave address assignment function)**

The QJ71AS92 automatically assigns the same address to the new slave (same type of product) whose slave address is 0, when changing a slave.

[Specifications]

Item		Specifications
Max. number of AS-i slaves ^{*1}		62 (Group A: 31, Group B: 31)
Max. number of I/O points ^{*2} (1 point = 1 bit)	Input	248 points
	Output	248 points
Max. number of analog I/O points (1 point = 16 bits)	Input	124 points
	Output	124 points
I/O refresh time		Approx. 5ms (I/O slave group A and B are separate) Approx. 10ms (I/O slave group A and B are together) Approx. 35ms (per analog slave channel)
Communication speed		167kbps
Max. transmission distance		100m (300m with two repeaters)
Connection type		Bus network type (star, line, tree and ring types)
Communication method		APM modulation method (Alternating Pulse Modulation)
Error control method		Parity check
Internal memory		EEPROM (for parameter setting), number of writes: 100,000 times
Number of occupied I/O points		32 points (I/O assignment: 32 intelligent points)
Cable type		Use dedicated AS-i cable.
External power supply	Voltage	TYP. 30.5VDC (supplied by AS-i power supply)
	Current consumption	46mA (TYP. 30.5VDC)
5VDC internal current consumption		0.40A
Weight		0.12kg

*1: This is the max. number of Ver. 2.11-compatible I/O slaves (can be grouped) configured in the same system. If Ver.2.11-compatible I/O slaves that cannot be grouped, analog slaves, and Ver. 2.04-compatible slaves are used together in the same system, calculate the max. number of slaves using the following expression.

$$(N_{IO-A} + N_{IO-B}) + 2 \times (N_A + N_{IO}) \leq 62 \text{ (Group A 31, Group B 31)}$$

Number of Group A Ver. 2.11-compatible slaves: N_{IO-A}
Number of analog slaves: N_A

Number of Group B Ver. 2.11-compatible slaves: N_{IO-B}
Number of Ver. 2.04-compatible slaves: N_{IO}

Slave Type	Grouping
AS-i Ver. 2.11-compatible I/O slave	Please confirm with the manufacturer of the I/O slave unit whether the unit can be grouped.
AS-i Ver. 2.04-compatible I/O slave	Disabled
AS-i Ver. 2.11-compatible analog slave	

*2: One slave uses four inputs and four outputs.

One analog slave also uses four inputs and four outputs.

(2) GX Configurator-AS Version 1

The GX Configurator-AS utility software incorporates two main features, automatic refresh setting and monitor/test.

- 1) The QJ71AS92 automatic refresh data is set from within the software. This enables easier programming and reduces the sequence program without having to use separate TO/FROM instructions.
- 2) The monitor/test functions, provides easier monitoring/testing of network settings and operation status.

[Functions]

Feature	Functions
Configuration	<ul style="list-style-type: none"> • Automatic refresh setting • Configuration data registration • Configuration data save to EEPROM
Monitor/test	<ul style="list-style-type: none"> • X·Y monitor/test • Buffer memory monitor/test • Command request

[Operating environment]

Item		Descriptions
Operating system		Microsoft® Windows® 95 Operating System
		Microsoft® Windows® 98 Operating System
		Microsoft® Windows® Millennium Edition Operating System
		Microsoft® WindowsNT® Workstation4.0 Operating System
		Microsoft® Windows® 2000 Professional Operating System
Installation (Add-in) destination *1		Add-in to GX Developer Version4 (English language version) or later *2
Computer main unit		Pentium® (133 MHz*3 or faster recommended) based personal computers that are compatible with Windows® Operating System
Required memory		32 MB or more *4
Available hard disk space	For installation	25MB or more
	For operation	10MB or more
Display resolution		800 × 600 pixels or higher *5

*1: GX Configurator-AS requires GX Developer Version 4 or higher of the same language version.

- The combined use of different language versions is not available (as shown below).
 - GX Developer (English version) and GX Configurator- AS (Japanese version)
 - GX Developer (Japanese version) and GX Configurator- AS (English version)

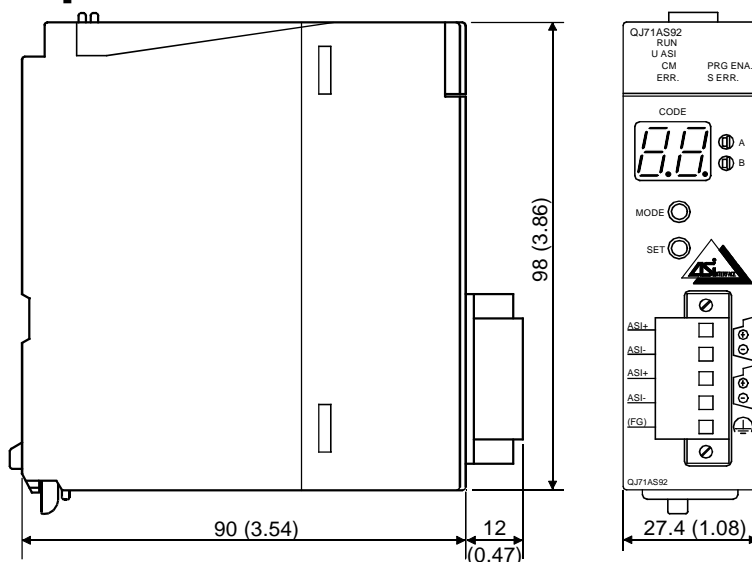
*2: GX Configurator- AS cannot be used as an add-in with GX Developer Version 3 or earlier.

*3: A Pentium® 150Mhz processor or higher is recommended when using Windows® Me.

*4: 64MB or more memory is recommended when using Windows 2000.

*5: Choosing “Small Fonts” size for Windows® is recommended as setting to “Large Fonts” might cause the text to extend off the screen.

[External Dimensions]



Unit: mm (inch)

[Manual]

Manual name	Manual supply status	IB/SH No.	Model code
AS-i Master Module User's Manual (Hardware)	Included with product	IB-0800225-A	13JT88
AS-i Master module User's Manual	Sold separately *	SH-080291E-A	13JR53

*1: This product includes the manual data in PDF format. In addition, Acrobat Reader, the software needed to view PDF format document on a personal computer, is included. The printed manual is also available separately.

Notes

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Country/Region	Sales office	Tel/Fax
U.S.A	Mitsubishi Electric Automation Inc. 500 Corporate Woods Parkway Vernon Hills, IL 60061	Tel : +1-847-478-2100 Fax : +1-847-478-0328
Brazil	MELCO-TEC Rep. Com.e Assessoria Tecnica Ltda. Av. Rio Branco, 123-15 ,and S/1507, Rio de Janeiro, RJ CEP 20040-005, Brazil	Tel : +55-21-221-8343 Fax : +55-21-221-9388
Germany	Mitsubishi Electric Europe B.V. German Branch Gothaer Strasse 8 D-40880 Ratingen, GERMANY	Tel : +49-2102-486-0 Fax : +49-2102-486-717
U.K	Mitsubishi Electric Europe B.V. UK Branch Travellers Lane, Hatfield, Herts., AL10 8XB, UK	Tel : +44-1707-276100 Fax : +44-1707-278695
Italy	Mitsubishi Electric Europe B.V. Italian Branch Centro Dir. Colleoni, Pal. Perseo - Ingr.2 Via Paracelso 12, 20041 Agrate B., Milano, Italy	Tel : +39-039-60531 Fax : +39-039-6053312
Spain	Mitsubishi Electric Europe B.V. Spanish Branch Carretera de Rubi 76-80 08190 - Sant Cugat del Valles, Barcelona, Spain	Tel : +34-935-653135 Fax : +34-935-891579
South Africa	Circuit Breaker Industries LTD. Private Bag 2016, Isando 1600, Johannesburg, South Africa	Tel : +27-11-928-2000 Fax : +27-11-392-2354
Hong Kong	Ryoden Automation Ltd. 10th Floor, Manulife Tower, 169 Electric Road, North Point, HongKong	Tel : +852-2887-8870 Fax : +852-2887-7984
China	Ryoden International Shanghai Ltd. 3F Block5 Building Automation Instrumentation Plaza 103 Cao Bao Rd. Shanghai 200233 China	Tel : +86-21-6475-3228 Fax : +86-21-6484-6996
Taiwan	Setsuyo Enterprise Co., Ltd. 6F., No.105 Wu-Kung 3rd.RD, Wu-Ku Hsiang, Taipei Hsine, Taiwan	Tel : +886-2-2299-2499 Fax : +886-2-2299-2509
Korea	HAN NEUNG TECHNO CO.,LTD. 1F Dong Seo Game Channel Bldg., 660-11, Deungchon-dong Kangsec-ku, Seoul, Korea	Tel : +82-2-3660-9552 Fax : +82-2-3664-8372
Singapore	Mitsubishi Electric Asia Pte, Ltd. 307 ALEXANDRA ROAD #05-01/02, MITSUBISHI ELECTRIC BUILDING SINGAPORE 159943	Tel : +65-473-2480 Fax : +65-476-7439
Thailand	F. A. Tech Co.,Ltd. 898/28,29,30 S.V.CITY BUILDING,OFFICE TOWER 2,FLOOR 17-18 RAMA 3 ROAD,BANGKONGPANG,YANNAWA,BANGKOK 10120	Tel : +66-2-682-6522 Fax : +66-2-682-6020
Indonesia	P.T. Autoteknindo SUMBER MAKMUR JL. MUARA KARANG SELATAN BLOK A UTARA NO.1 KAV. NO.11 KAWASAN INDUSTRI/ PERGUDANGAN JAKARTA - UTARA 14440	Tel : +62-21-663-0833 Fax : +62-21-663-0832
India	Messung Systems Put,Ltd. Electronic Sadan NO:111 Unit No15, M.I.D.C BHOSARI,PUNE-411026	Tel : +91-20-7128927 Fax : +91-20-7128108
Australia	Mitsubishi Electric Australia Pty. Ltd. 348 Victoria Road, PostalBag, No 2, Rydalmere, N.S.W 2116, Australia	Tel : +61-2-9684-7777 Fax : +61-2-9684-7245



HEAD OFFICE : 1-8-12, OFFICE TOWER Z 14F HARUMI CHUO-KU 104-6212, JAPAN
NAGOYA WORKS : 1-14, YADA-MINAMI5, HIGASHI-KU, NAGOYA, JAPAN